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ABSTRACT

A study investigated the relationship between classroom discussion and literacy development in a college developmental reading classroom. It explored the implementation of C. Goldenberg's instructional conversation model (1992/93), focusing on the relatively untested assumption that discussion promotes reading comprehension, interpretation, and thinking. The applicability of a model originally developed for use with elementary school children to a new student population was also assessed. Subjects were 14 students (ages 17 to 70) enrolled in a critical reading class in a public university on the basis of their poor performance on their reading/writing placement tests. Six students spoke English as their second language, while two students had diagnosed learning disabilities. Each week they read an assigned text, wrote a summary and an elaboration, and prepared two questions for an instructional conversation (IC). Students rewrote their written summaries and elaborations for homework and handed them in at the beginning of the next class so that pre- and post-discussion comprehension and writing could be compared. Data were collected in two conditions: guided discussions were conducted once a week; general discussions occurred once a month. Six instructional conversations were analyzed--three of the guided discussions and three general discussions. Six major findings emerged: students were more likely to incorporate IC ideas, phrases, and themes in the guided IC than the general IC condition; the IC's influenced students' thinking about texts but did not greatly affect the overall quality of their post-IC elaborations and summaries; when students' writing reflected the IC, it did not reflect one source of influence but rather various; students and teacher perceived many benefits of IC's; the learning-disabled students and the teacher expressed concerns about the IC's losing focus and moving too quickly; and student participation in the IC's was influenced by a variety of factors, particularly interest in and knowledge of the topic. (Contains 30 references.) (NKA)

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What Do Students Learn From Classroom Discussion? Exploring the Effects of Instructional Conversations on College Students' Learning

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What Do Students Learn From Classroom Discussion?
Exploring the Effects of Instructional Conversations on College Students' Learning

Purpose

The purpose of this qualitative study was to investigate the relationship between classroom discussion and literacy development in a college developmental reading classroom. It explored the implementation of Goldenberg's instructional conversation model (1992/93) with particular attention to the relatively untested assumption that discussion promotes reading comprehension, interpretation, and thinking. The study also assessed the applicability of a model originally developed for use with elementary school children to a new student population. The study was based on the following questions: (a) what is the influence of general versus guided discussion on the students' comprehension of the text discussed? (b) what is the influence of general versus guided discussion on the quality of the students' interpretive writing? (3) what are students' perceptions of classroom discussion?

Theoretical and Research Framework

This study was based upon the assumption that talking with others about a text promotes thinking, reasoning, and understanding. This idea is informed by sociocultural theory (Rogoff, 1990; 1995; Vygotsky, 1978;1986) and the transactional theory of reading response (Rosenblatt, 1978). From the perspective of sociocultural theory, classroom discussion offers the opportunity for apprenticeship in academic discourse and the creative, dynamic process involved in appropriating or transforming knowledge into one's own. Furthermore, discussion offers teachers the opportunity to engage students in the "zone of proximal development"; to find out where they are, what they think, and then extend that thinking. Finally, it offers a forum in which students can verbalize their thoughts and ideas, developing and clarifying them in the process. According to the transactional theory of reading response, the reader's response during reading is a first step in the interpretive process. By reflecting on his/her responses and identifying and articulating what has been evoked by the text and why, the reader begins to interpret it. Writing and talking about text facilitate response, reflection, and interpretation.

Although these theories are well-known in the academic community and the value of discussion is often cited in the research literature and education texts, it is well documented that discussion is rare in American classrooms at all levels of schooling and that lecture and "recitation" prevail (e.g., Alvermann, et al., 1995; Alvermann, et al., 1990; Cazden, 1988; Goodlad, 1984; Kuhn, 1984; Marshall, et al., 1995 Mehan, 1979; Nunn, 1992; Nystrand and Gamoran, 1997, Sandberg, 1993). Several researchers have explored alternatives to lecture and recitation by observing classes where discussion is occurring and by creating discussion models. These interactive discussion approaches are characterized by open-ended questions posed by the teacher, arranging seats in circles, teachers building on students' responses by restating and posing follow-up questions, and relating the text to prior life or literary experiences (e.g., Almasi, McKeown, and Beck, 1996; Beck and McKeown, 1996; Goldenberg, 1992/93; Goldenberg and Patthey-Chavez, 1995; Marshall, et al., 1995; Nystrand and Gamoran, 1997; Roberts and Langer, 1991; Tharp and Gallimore, 1988).

Research has demonstrated the effectiveness of interactive discussion models at bridging home and school knowledge for learners from cultural and linguistic minorities, and at promoting the use of complex language and student participation (e.g., Cazden, 1988; Dillon, 1989; Echevarria, 1995; Goldenberg, 1992/93; Goldenberg and Patthey-Chavez, 1995; Hull and Rose, 1990; Roberts and Langer, 1991; Tharp and Gallimore, 1988). However, little empirical evidence exists to support a relationship between discussion and student achievement. Consequently, the assumption that discussion improves critical thinking skills or performance on reading and writing tasks that display those skills is largely untested. In addition, few research studies have explored classroom discussion and its effects on learning in higher education.

Methodology

Discussion Model: The instructional conversation approach developed by Goldenberg (1992/93) was selected as the interactive discussion model for this study for three reasons: (a) the instructional conversation model is replicable across studies because it is specific in its description of its ten essential elements and a rating guide exists to rate the degree to which the elements are present in the discussion, (b) no interactive discussion model specifically for college students is described in the research literature, and (c) although they are adults, the students in the teacher/researcher's class came from backgrounds similar to the children studied in the instructional conversation research. Some had learning disabilities and many came from cultural, racial, and linguistic minorities.

Setting and Subjects: Research was conducted in the teacher/researcher's Critical Reading I class at a public, urban university. The fourteen students enrolled in the class agreed to participate in the study. They were placed in the class on the basis of their poor performance on the college's reading and writing placement test. Students in the class ranged in age from seventeen to seventy. They also came from diverse cultural and linguistic backgrounds. One was Chinese, two were Nigerian, two were Hispanic, one was Haitian, seven were Caucasian, and one was African-American. Six students spoke English as their second language, two students had diagnosed learning disabilities, and four additional students said they had difficulty with reading or writing. Three were female and eleven were male.

Data Collection Procedures: Each week the students read an assigned text, wrote a summary and an elaboration (i.e. what seems important in the text and why) and prepared two questions for an instructional conversation (IC). IC lessons were characterized by the ten elements described in Goldenberg (1992/93). These are (1) a challenging, but non-threatening atmosphere, (2) a high level of teacher responsivity to students' contributions, (3) open-ended questions, (4) connected discourse, (5) broad participation, (6) a thematic focus, (7) the elicitation of students' background knowledge, (8) direct teaching when necessary, (9) the promotion and use of complex language, and (10) the use of text and experience as a basis for statements and hypotheses. IC lessons were videotaped by a research assistant. Students rewrote their written summaries and elaborations for homework and handed them in at the beginning of the next class so that pre- and post-discussion comprehension and writing could be compared.

Data were collected in two conditions. Guided discussions were conducted once per week; general discussions occurred once per month. In the guided discussion condition, the teacher/researcher focused the end of the IC on questions related to the summary and elaborations tasks (i.e. What is the main idea of this reading? What seems important and why?) and wrote the students' responses on the chalkboard. In the general discussion condition, these questions were not posed and nothing was recorded on the chalkboard. After each IC lesson, the teacher/researcher reflected on the lesson in a journal, documenting her observations. Students were interviewed at mid-semester and asked to comment on the value of the class discussions. In addition, so as to better understand the influence of discussion versus other factors (e.g., re-reading the text) on the changes made from one draft to another, students were asked to describe their routines for rewriting their summaries and elaborations. Additional data sources regarding the students' perceptions of the class discussions were mid-semester and semester-end course evaluation forms.

Data Analysis: Six instructional conversations were chosen for analysis: three of the nine guided discussions and the three general discussions. The IC's chosen for analysis and comparison were selected on the basis of comparable text difficulty measured by the Bormuth grade level index to minimize the influence of text difficulty on the effects of the IC lessons. To assess the degree to which the discussions resembled instructional conversations, each videotaped IC was rated by the teacher/researcher according to the scale developed by Rueda, Goldenberg, and Gallimore (1992). Three of the six videotapes selected for analysis were also rated independently by a research assistant. Interrater agreement was 100%. In order to examine the effects of the class discussion on students' text comprehension and interpretive writing, the teacher/researcher scored students' pre- and post-IC summaries and elaborations according to rubrics developed by Paratore, Garnick, and Mauro (1995). Ten percent of the writing samples were scored independently by a research assistant to establish the reliability of the scoring rubrics. Interrater agreement was 91% on the summaries (r=.9) and 78% on the elaborations (r=.79). Summary and elaboration scores from each guided IC were compared to scores from the comparable general IC to assess the impact of these two conditions on the students' post-IC summaries and elaborations. The summaries and elaborations were also compared to transcripts of the instructional conversations to assess the influence of ideas raised during the IC's on students' post-IC writing. Summaries and elaborations were divided into three categories: (a) those that improved in score, (b) those that reflected ideas raised during the IC, and (c) those that both improved and reflected the IC. The Fisher Exact Probability Test was used to determine whether the proportion of improved and IC-influenced summaries and elaborations differed significantly in the two conditions. Summaries and elaborations that reflected the IC were also analyzed to determine the source of influence (e.g., the teacher, another student, the chalkboard notes). Student interviews were transcribed and analyzed according to the following coding categories: the value of class discussions, factors influencing participation, routines for rewriting, and students' concerns about IC's. Students' course evaluations were analyzed for the first two categories indicated above. The teacher/researcher's journal was analyzed according to two coding categories: benefits of IC's and concerns about IC's.

Results and Conclusions

Six major findings emerged from the data analyses: (a) students were more likely to incorporate IC ideas, phrases, and themes in the guided IC condition than the general IC condition, but the differences between the two

conditions were not statistically significant at the .05 level; however, the data showed a clear trend in the direction of statistical significance, (b) the guided and general IC's influenced students' thinking about texts but did not greatly affect the overall quality of their post-IC elaborations and summaries, (c) when students' writing reflected the IC, it did not reflect one source of influence (e.g., the teacher); rather students were variously influenced by the teacher, other students, their own comments, and the chalkboard notes, (d) the students and the teacher perceived many benefits of IC's including greater text comprehension, learning about different perspectives, improved social and communication skills, and increased opportunities for students to share experiences and knowledge with each other and the teacher, (e) the two students with diagnosed learning disabilities and the teacher expressed concerns about the IC's losing focus and moving too quickly, and (f) student participation in the IC's was influenced by a variety of factors, particularly an interest in and knowledge of the topic.

In general the data suggested that the IC model adapted well to the college classroom and that most of the students were engaged in and motivated by the discussions. However, the data also raise some important questions. First, given the fact that less than half of the students typically used the IC to improve the overall quality of their summaries and elaborations, how effective is the IC at improving these skills? It is an emerging pattern in the instructional conversation research that IC's do not always lead to increased academic achievement on measures of reading and writing ability (Echevarria, 1995; Saunders and Goldenberg, in press). However, simply because the studies exploring the effects of instructional conversations on students' learning have not proven unequivocally that IC's improve students' academic performance on the measures used is not a reason to conclude that IC's are not worthy of classroom time. What the evidence suggests is that the IC alone may not be sufficient to improve students' academic skills. Thus, depending upon students' needs, direct instruction in the relevant academic skills should be a component of any classroom using the IC model. The findings also suggest that measures such as summary writing may not adequately capture the effects of IC's. Many of the benefits of IC's, such as improved social and communication skills, were revealed in student interviews and course evaluation forms. Other studies investigating students' perceptions of class discussions also suggest that students value discussion because it helps them understand and write about what they read (Alvermann, et al., 1995; Knoeller, 1994). Few research studies have addressed students' perspectives about discussion, suggesting that what students have to say about the effectiveness of such pedagogy has been undervalued.

A second question raised by the findings is how appropriate is the model for all students, and particularly those with learning disabilities if one student with dyslexia complained that he was overwhelmed by the amount of information presented in an IC and failed to complete many of his writing assignments? Another emerging pattern in the instructional conversation research is that lower achieving students may need additional support organizing and appropriating the information shared in an IC and making use of it in subsequent academic tasks (Echevarria, 1995; Saunders and Goldenberg, in press). This evidence should not be interpreted as reason to withhold instructional conversations or classroom discussion from lower achieving students. Research demonstrates that such students typically have fewer opportunities to participate in such discussions than higher achieving students (Nystrand and Gamoran, 1997) and that there are clear benefits (e.g., use of more complex language, greater understanding of concepts, increased attentiveness) when students participate in instructional conversations as opposed to traditional basal lessons (Echevarria, 1995; Echevarria and McDonough, 1995). Instead, the findings from this study and the others cited suggest that we examine how to best assist lower achieving students learn from and make use of class discussions.

Findings from the study also raise questions about what is an appropriate degree of teacher support and guidance during instructional conversations. The teacher/researcher and two of the students expressed concerns about the IC's losing focus. Some degree of balance must be achieved between encouraging and following up on each individual student's contribution to the discussion and staying focused. Such a balance can be achieved by including a "guided" portion of the discussion at the end. This study demonstrated that focusing the discussion on the summary and elaboration tasks at the end had a positive effect on students' learning. However, this approach may not have gone far enough since all students did not demonstrate the positive effects of the IC in their subsequent writing. A more extended guided portion of the discussion might achieve the kind of balance necessary to support all students' learning from classroom discussions.

Educational Significance

Clearly, one study can yield only limited knowledge about the effectiveness of any pedagogy. However, when combined with the emerging research about instructional conversations (Echevarria, 1995; Saunders and Goldenberg, in press) and other relevant research (e.g., Raphael and Goatley, 1997) this study has important implications for classrooms and the use of instructional conversations. This study supports the inclusion of instructional conversations as a foundation of classroom life, furthering students' construction and appropriation of new knowledge and skills, as well as the teacher's ability to assess and respond to students' needs. While affirming the value of instructional conversations, the study also illustrates the need for alternative ways of assessing what students learn from IC's and additional instructional strategies to support all students' learning from classroom discussion.

References

Almasi, J., McKeown, M., & Beck, I. (1996). The nature of engaged reading in classroom discussions of literature. Journal of Literacy Research, 28(1), 107-146.

Alvermann, D., O'Brien, D., & Dillon, D. (1990). What teachers do when they say they're having discussions of content area reading assignments: A qualitative analysis. Reading Research Quarterly, 25(4), 296-322.

Alvermann, D., Weaver, D. , Hinchman, K., Moore, D., Phelps, S., Thrash, E., & Zalewski, P. (1995). Middle and high school students' perceptions of how they experience text-based discussions: A multicase study. (Reading Research Report No. 36). College Park, Maryland: National Reading Center.

Beck, I. & McKeown, M. (1996). Building understanding of text ideas through discussion. Paper presented at the meeting of the American Educational Research Association, New York.

Cazden, C. (1988). Classroom Discourse: The Language of Teaching and Learning. Portsmouth, NH: Heinemann.

Dillon, D. (1989). Showing them that I want to learn and that I care about who they are: A Microethnography of the social organization of a secondary low-track English-reading classroom. American Educational Research Journal, 26(2), 227-259.

Echevarria, J. (1995). Interactive reading instruction: A comparison of proximal and distal effects of instructional conversations. Exceptional Children, 61(6), 536-552.

Echevarria, J. & McDonough, R. (1995). An alternative reading approach: Instructional conversations in a bilingual special education setting. Learning Disabilities Practice, 10(2), 108-119.

Goldenberg, C. (1992/93). Instructional Conversations: Promoting comprehension through discussion. The Reading Teacher, 46(4), 316-326.

Goldenberg, C. & Patthey-Chavez, G. (1995). Discourse processes in instructional conversations: Interactions between teacher and transition readers. Discourse Processes, 19, 57-73.

Goodlad, J. (1984). A Place Called School. New York: McGraw-Hill Book Company.

Hull, G. & Rose, M. (1990/1994). "This wooden shack place"; The logic of an unconventional reading. In R. Ruddell, M. Ruddell, & H. Singer (Eds.), Theoretical Models and Processes of Reading (4th ed., pp. 231-243). Newark, DE: International Reading Association.

Knoeller, C. (1994). Negotiating interpretations of text: The role of student-led discussions in understanding literature. Journal of Reading, 37(7), 572-580.

Kuhn, M. (1984). A discourse analysis of discussions in the college classroom. Unpublished doctoral dissertation, Harvard University.

Marshall, J., Smagorinsky, P., & Smith, M. (1995). The Language of Interpretation: Patterns of Discourse in Discussions of Literature. Urbana, Ill.: National Council of Teachers of English.

Mehan, H. (1979). Learning Lessons: Social Organization in the Classroom. Cambridge, MA: Harvard University Press.

Nunn, C. (1992). The relationship between teaching techniques and undergraduate participation in classroom discussion. [CD-Rom]. Abstract from: ProQuest File: Dissertation Abstracts Item: AAC 9326218.

Nystrand, M. & Gamoran, A. (1997). The big picture: Language and learning in hundreds of English lessons. In M. Nystrand (Ed.), Opening Dialogue: Understanding the Dynamics of Language and Learning in the English Classroom (pp. 30-74). New York: Teachers College Press.

Paratore, J., Garnick, S., & Mauro, A. (1995). Mandated performance assessment in literacy: Influence on teachers' decisions about classroom assessment and subsequent instruction. Paper presented at the meeting of the National Reading Conference, New Orleans.

Raphael, T. & Goatley, V. (1997). Classrooms as communities: Features of community share. In S. McMahon & T. Raphael (Eds.) The Book Club Connection: Literacy Learning and Classroom Talk (pp. 26-46). New York: NY: Teachers College Press.

Roberts, D. & Langer, J. (1991). Supporting the process of literary understanding: Analysis of a classroom discussion (Report series 2.15). Albany, NY: SUNY-Albany, Center for the Learning and Teaching of Literature.

Rogoff, B. (1990). Apprenticeship in Thinking: Cognitive Development in Social Context. New York: Oxford University Press.

Rogoff, B. (1995). Observing sociocultural activity on three planes: participatory appropriation, guided participation, and apprenticeship. In J. Wertsch, P. Del Rio, A. Alverez (Eds.), Sociocultural Studies of Mind (pp. 139-164). New York: Cambridge University Press.

Rosenblatt, L. (1978). The Reader, the Text, the Poem: The Transactional Theory of the Literary Work. Carbondale, Ill.: Southern Illinois University Press.

Rueda, R., Goldenberg, C., & Gallimore, R. (1992). Rating instructional conversations: A guide. (Educational Practice Report No. 4). Santa Cruz, CA: National Center for Research on Cultural Diversity and Second Language Learning.

Sandberg, K. (1993). An investigation of the promotion of dialectical thinking in college classrooms. Unpublished doctoral dissertation, Boston University.

Saunders, W. & Goldenberg, C. (In press). Talk, text, themes, and understanding: The effects of an instructional conversation on transition students' concepts of friendship and story comprehension. In R. Horowitz (Ed.) Talk about Text: Developing Understanding of the World Through Talk and Text. Newark, DE: International Reading Association.

Tharp, R. & Gallimore, R. (1988). Rousing Minds to Life. New York: Cambridge University Press.

Vygotsky, L. (1978) Mind in Society. Cambridge, MA: Harvard University Press.

Vygotsky, L. (1986). Thought and Language. Cambridge, MA: The MIT Press.